

CLAIM Amendments

Claim 1. (Currently Amended) An isolated nucleic acid encoding an upstream serine threonine kinase (MEKK) interacting forkhead associated (FHA) protein (~~MIF1~~) that comprises the amino acid sequence of SEQ ID NO:2.

Claim 2. (Canceled)

Claim 3. (Previously Presented) The isolated nucleic acid of claim 1 comprising the nucleotide sequence as depicted in SEQ ID NO:1.

Claims 4-6 (Canceled)

Claim 7. (Currently Amended) The isolated nucleic acid of claim 1, further comprising a sequence encoding a polypeptide tag, whereby the nucleic acid encodes a chimeric tagged ~~MIF1~~ MEKK interacting FHA protein.

Claim 8. (Previously Presented) A vector comprising the isolated nucleic acid of claim 1.

Claim 9. (Currently Amended) The vector according to claim 8 wherein the isolated nucleic acid is operatively associated with an expression control sequence permitting expression of ~~MIF1~~ polypeptide the MEKK interacting FHA protein in an expression competent host cell.

Claim 10. (Original) The vector according to claim 9 selected from the group consisting of an RNA molecule, a plasmid DNA molecule, and a viral vector.

Claim 11. (Currently Amended) A composition comprising the ~~The~~ plasmid DNA molecule of Claim 10, ~~further comprising and~~ a composition selected from the group consisting of a DNA condensing protein, a cationic lipid, a liposome, a polymer, and a DNA precipitating agent.

Claim 12. (Previously Presented) The viral vector according to claim 10, selected from the group consisting of a retrovirus, an adenovirus, an adeno-associated virus, a herpes virus, and an vaccinia virus.

Claim 13. (Original) A host cell transfected with the vector of claim 8.

Claim 14. (Original) A host cell transfected with the vector of claim 9.

Claim 15. (Original) The host cell of claim 14 selected from the group consisting of a bacterial cell, a yeast cell, and a mammalian cell.

Claim 16. (Currently Amended) A method for producing ~~MIF1~~ an upstream serine threonine kinase (MEKK) interacting forkhead associated (FHA) protein comprising the amino acid sequence of SEQ ID NO:2, comprising:

culturing the host cell of claim 14 in culture medium under conditions permitting expression of ~~MIF1~~ the MEKK interacting FHA protein; and

isolating the ~~MIF1~~ the MEKK interacting FHA protein from the culture.

Claims 17-19 (Canceled)

Claim 20. (Currently Amended) An isolated upstream threonine kinase (MEKK) interacting forkhead associated (FHA) protein (~~MIF1~~) comprising the amino acid sequence of SEQ ID NO:2.

Claims 21-24. (Canceled)

Claim 25. (Currently Amended) The isolated MEKK interacting FHA protein of claim 20, further comprising a polypeptide tag.

Claims 26-44 (Canceled)

Claim 45. (Previously Presented) A vector comprising the isolated nucleic acid of claim 3.

Claim 46. (Previously Presented) The vector according to claim 45, wherein the isolated nucleic acid is operatively associated with an expression control sequence.

Claim 47. (Currently Amended) ~~the~~ The vector of Claim 46, selected from the group consisting of an RNA molecule, a plasmid DNA molecule, and a viral vector.

Claim 48. (Currently Amended) A composition comprising the ~~The~~ plasmid DNA molecule of Claim 48, ~~further comprising 47 and~~ a composition selected from the group consisting of a DNA condensing protein, a cationic lipid, a liposome, a polymer, and a DNA precipitating agent.

Claim 49. (Previously Presented) The viral vector according to claim 47, selected from the group consisting of a retrovirus, an adenovirus, an adeno-associated virus, a herpes virus, and a vaccinia virus.

Claim 50. (Previously Presented) A host cell transfected with the vector of Claim 45.

Claim 51. (Previously Presented) A host cell transfected with the vector of Claim 46.

Claim 52. (Previously Presented) The host cell of Claim 51 selected from the group consisting of a bacterial cell, a yeast cell, and a mammalian cell.

Claim 53. (Currently Amended) A method for producing ~~MIF1~~ an upstream serine threonine kinase (MEKK) interacting forkhead associated (FHA) protein comprising the amino acid sequence of SEQ ID NO:2, comprising:

culturing the host cell of claim 51 in culture medium under conditions permitting expression of ~~MIF1~~ the MEKK interacting FHA protein; and
isolating the ~~MIF1~~ the MEKK interacting FHA protein from the culture.